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CAM No.: 232200-999211

Amendments to the Claims:

This following listing of claims will replace all prior versions and listings of claims in

the application.

<u>Listing of claims</u>:

1. (Canceled).

2. (Previously Presented) The bone plating system of claim 8, wherein the at least one

threaded hole has a double lead thread.

3. (Previously Presented) The bone plating system of claim 8, wherein the head of the first

screw has a double lead thread.

4. (Previously Presented) The bone plating system of claim 8, wherein the head portion is

twisted.

5. (Previously Presented) The bone plating system of claim 8, wherein the head portion is

tapered.

6. (Previously Presented) The bone plating system of claim 8, wherein the head portion

includes at least one suture hole.

7. (Previously Presented) The bone plating system of claim 8, wherein the shaft portion

terminates in a tapered tail.

8. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

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a first screw having a shaft with a thread for engaging bone and a head with a thread configured and dimensioned to mate with the threaded hole; and a second screw having a shaft with a thread for engaging bone and a head, wherein the first and second screws remain seated in their respective holes for substantially as long as the bone plate is implanted;

wherein the bone plate further includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone, the head portion having a curved surface, an anterior fork substantially parallel to an anterior side of the shaft portion, and a posterior fork extending out from a posterior side of the shaft portion and wherein all of the screw holes located in the head portion are at least partially threaded.

- 9. (Previously Presented) A bone plating system for fixation of bone comprising:
  - a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and at least one non-threaded hole passing through the upper and lower surfaces;

- a first screw having a shaft with a thread for engaging bone and a head with a thread configured and dimensioned to mate with the threaded hole; and
- a second screw having a shaft with a thread for engaging bone and a head, wherein the first and second screws remain seated in their respective holes for substantially as long as the bone plate is implanted;

wherein the bone plate further includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone, the head portion having a curved surface, an anterior fork substantially parallel to an anterior side of the shaft portion, and a posterior fork extending out from a posterior side of the shaft portion and wherein at least a first threaded hole and a second threaded hole are located in the head portion, and the first threaded hole and the second threaded hole have different diameters.

10. (Previously Presented) The bone plating system of claim 8, wherein at least a first threaded hole and a second threaded hole are located in the head portion, and the axes of the

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first and second threaded holes converge.

11. (Canceled)

12. (Previously Presented) The bone plating system of claim 19, wherein the at least one

threaded hole has a double lead thread.

13. (Previously Presented) The bone plating system of claim 19, wherein the head of the first

screw has a double lead thread.

14. (Previously Presented) The bone plating system of claim 19, wherein the head portion is

twisted.

15. (Previously Presented) The bone plating system of claim 19, wherein the head portion is

tapered.

16. (Previously Presented) The bone plating system of claim 19, wherein the head portion is

curved.

17. (Previously Presented) The bone plating system of claim 19, wherein the head portion

includes at least one suture hole.

18. (Previously Presented) The bone plating system of claim 19, wherein the shaft portion

terminates in a tapered tail.

19. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

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a second screw having a shaft with a thread for engaging bone and a head, wherein the first and second screws remain seated in their respective holes for substantially as long as the bone plate is implanted;

wherein the bone plate includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone and wherein the shaft portion includes at least one threaded hole and at least one non-threaded hole and only threaded screw holes are located in the head portion.

20. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted;

wherein the bone plate includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone and wherein the shaft portion includes at least one threaded hole and at least one non-threaded hole and the head portion includes at least a first threaded hole and a second threaded hole and the first threaded hole and the second threaded hole have different diameters.

21. (Previously Presented) The bone plating system of claim 19, wherein at least a first threaded hole and a second threaded hole are located in the head portion, and the axes of the first and second threaded holes converge.

22. (Canceled)

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23. (Previously Presented) The bone plating system of claim 30, wherein the at least one

threaded hole has a double lead thread.

24. (Previously Presented) The bone plating system of claim 30, wherein the head of the first

screw has a double lead thread.

25. (Previously Presented) The bone plating system of claim 30, wherein the head portion is

twisted.

26. (Previously Presented) The bone plating system of claim 30, wherein the head portion is

tapered.

27. (Previously Presented) The bone plating system of claim 30, wherein the head portion is

curved.

28. (Previously Presented) The bone plating system of claim 30, wherein the head portion

includes at least one suture hole.

29. (Previously Presented) The bone plating system of claim 30, wherein the shaft portion

terminates in a tapered tail.

30. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted;

wherein the bone plate includes a head portion configured and dimensioned to

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conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone and wherein the shaft portion has a trapezoidal shaped cross-section in regions between the threaded and non-threaded holes for minimizing contact between bone and the lower surface and only threaded screw holes are located in the head portion.

31. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted;

wherein the bone plate includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone and wherein the shaft portion has a trapezoidal shaped cross-section in regions between the threaded and non-threaded holes for minimizing contact between bone and the lower surface and the head portion has at least a first threaded hole and a second threaded hole and the first threaded hole and the second threaded hole have different diameters.

32. (Previously Presented) The bone plating system of claim 30, wherein at least a first threaded hole and a second threaded hole are located in the head portion, and the axes of the

threaded holes converge.

33. (Canceled)

34. (Previously Presented) The bone plating system of claim 41, wherein the at least one

threaded hole has a double lead thread.

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35. (Previously Presented) The bone plating system of claim 41, wherein the head of the first

screw has a double lead thread.

36. (Previously Presented) The bone plating system of claim 41, wherein the head portion is

twisted.

37. (Previously Presented) The bone plating system of claim 41, wherein the head portion is

tapered.

38. (Previously Presented) The bone plating system of claim 41, wherein the head portion is

curved.

39. (Previously Presented) The bone plating system of claim 41, wherein the head portion

includes at least one suture hole.

40. (Previously Presented) The bone plating system of claim 41, wherein the shaft portion

terminates in a tapered tail.

41. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted,

wherein the bone plate includes a head portion configured and dimensioned to

conform to a metaphysis of a bone and a shaft portion configured and dimensioned to

conform to a diaphysis of a bone and wherein the head portion flares outward from the shaft

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and only threaded screw holes are located in the head portion.

42. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a head with a thread

configured and dimensioned to mate with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted,

wherein the bone plate includes a head portion configured and dimensioned to conform to a metaphysis of a bone and a shaft portion configured and dimensioned to conform to a diaphysis of a bone and wherein the head portion flares outward from the shaft and includes at least a first threaded hole and a second threaded hole and the first threaded hole and the second threaded hole have different diameters.

43. (Previously Presented) The bone plating system of claim 41, wherein at least a first threaded hole and a second threaded hole are located in the head portion, and the axes of the

first and second threaded holes converge.

44. (Canceled)

45. (Canceled)

46. (Currently Amended) The bone plating system of claim 51 45, wherein the head portion

is twisted.

47. (Currently Amended) The bone plating system of claim 51 45, wherein the head portion

is tapered.

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48. (Currently Amended) The bone plating system of claim <u>51</u> 45, wherein the head portion

is curved.

49. (Currently Amended) The bone plating system of claim 51 45, wherein the head portion

includes at least one suture hole.

50. (Currently Amended) The bone plating system of claim 51 45, wherein the shaft portion

terminates in a tapered tail.

51. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface:

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a non-threaded head

for engagement with the threaded hole; and

a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted

wherein the bone plate includes a head portion configured and dimensioned to

conform to a metaphysis of a bone, the head portion flaring outward from a shaft portion

configured and dimensioned to conform to a diaphysis of a bone, and wherein only threaded

screw holes are located in the head portion.

52. (Previously Presented) A bone plating system for fixation of bone comprising:

a bone plate having:

an upper surface;

a lower surface;

at least one threaded hole passing through the upper and lower surfaces; and

at least one non-threaded hole passing through the upper and lower surfaces;

a first screw having a shaft with a thread for engaging bone and a non-threaded head

for engagement with the threaded hole; and

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a second screw having a shaft with a thread for engaging bone and a head, wherein

the first and second screws remain seated in their respective holes for

substantially as long as the bone plate is implanted

wherein the bone plate includes a head portion configured and dimensioned to conform to a

metaphysis of a bone, the head portion flaring outward from a shaft portion configured and

dimensioned to conform to a diaphysis of a bone, and wherein at least a first threaded hole

and a second threaded hole are located in the head portion, and the first threaded hole and the

second threaded hole have different diameters.

53. (Currently Amended) The bone plating system of claim <u>51</u> 45, wherein at least a first

threaded hole and a second threaded hole are located in the head portion, and the axes of the

first and second threaded holes converge.

54. (Currently Amended) The bone plating system of claim 53 44, wherein the first threaded

hole has a double lead thread.

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